

The Patterson Estate on St. Leonard
Creek: Archaeological Site
Inventory

CV

14

c. 2

CV
14
C.2

THE PATTERSON ESTATE
ON
ST. LEONARD CREEK:
AN
ARCHAEOLOGICAL SITE INVENTORY



MARYLAND
MANUSCRIPT

HISTORICAL
SERIES

TRUST
NO. 16

BY

WAYNE E. CLARK AND MICHAEL A. SMOLEK

THE PATTERSON ESTATE
ON
ST. LEONARD CREEK
AN ARCHAEOLOGICAL SITE INVENTORY

May 1980

Written For

Mrs. Jefferson Patterson

Washington, D. C.

By

Wayne E. Clark

State Administrator of Archaeology

Maryland Historical Trust

Annapolis, Maryland

and

Michael A. Smolek

Regional Archaeologist

Southern Maryland Regional Preservation Center

St. Mary's City, Maryland

Maryland Historical Trust Manuscript Series No. 16

Frontpiece: A late 17th century sketch by Peter Lindestrom depicting trade between the Europeans and Delaware Indians set in the context of the wars and daily life of the Indians (Rare Book Division, New York Public Library).

Abstract

The results of a one-week archaeological survey of the Point Farm in Calvert County are reported to aid the property owner, Mrs. Jefferson Patterson, in making decisions regarding the long-term historic preservation needs of her property. Of the 43 archaeological sites discussed, 36 are newly reported sites discovered during the field investigations. Six to eight of the newly discovered sites date to the 17th century, two of which represent the oldest known historic sites from Calvert County. The 35 prehistoric sites date from 7200 B.C. to possibly as late as 1660 A.D. This report also discusses the significant geological fossil deposits on the site which date to the Miocene period, some twelve million years ago. Results of the field investigations and analysis are presented to support the authors' and State Historic Preservation Officer's opinion that the sites are eligible for nomination to the National Register of Historic Places as a Historic Preservation District. The report concludes with recommendations for the preservation and interpretation of these invaluable sites.

Acknowledgements

The authors wish to thank Mrs. Jefferson Patterson for her interest in and support of historic preservation by granting permission to conduct an archaeological survey of the 600 acre Point Farm. Our gratitude is extended to Mrs. Joan Koven for serving as liaison for the project and for arranging for us to use the lovely beach cottage as a fieldhouse.

At Point Farm, Mrs. Joyce Eiler provided firewood for the cold nights and willingly assisted in meeting the daily needs of the project. Ms. Lana Brown, a tenant at Point Farm, made the original Indian artifact finds and shared her discoveries with Mrs. Patterson and the authors. Her support and enthusiasm throughout all stages of the project was an inspiration to all of us.

The success of the project results from the volunteer assistance of Jeanette Fox, Andrew Mycholiás, Lana Brown, Laurie Steponaitis and Denny White during the five field days of the project. We are thankful for their patience in walking "just one more field before the end of the day".

Dr. Ralph Eshelman, Director of the Calvert Marine Museum, kindly provided the geology section of this report and contributed much useful information. Donald Shomette, President of Nautical Archaeological Associates, unselfishly made sections of his soon-to-be-published book on the War of 1812 available to us. His years of careful research directly benefited the project.

During the artifact analysis, Henry Miller, Curator of the St. Mary's City Commission, shared his knowledge and excitement about the historic artifacts recovered. Some historical documentary research identifying the people who may have left these artifacts was provided by Dr. Lois Carr, also of the Commission. Denny White and Tom Richards of Hartzog, Lader

and Richards shared their thoughts as well as the results of their preliminary historical research. At the Maryland Historical Trust, Eli Harouche patiently drafted all of the maps used in the report. Linda Miller and Peggy Clarke took time from their tasks to type the final report.

A heartfelt thanks is extended to the many contributors who aided in the discovery and interpretation of the rich heritage at Point Farm.

The initial results of the fieldwork and historical research are presented in this report. Also provided is an assessment of the twelve million year old fossil beds along St. Leonard's Creek. The past twelve thousand years of rising sea level and changing climatic conditions are also discussed. This overview provides a basis for discussion of the Indian sites. Then the historic period sites will be placed within a temporal framework provided by a review of the historic records. Individual site descriptions are presented in table form. The report concludes by recommending various options for long term study, interpretation and preservation.

MODERN ENVIRONMENT

The natural beauty of the Patterson property results from the interplay of the geological formations, plant and animal life, and the man-made changes to the natural environment. Within the 600 acres of the property, a representative sample of southern Maryland's natural and rural environments is present. The uplands on the property rise from an elevation of 40 feet along the major farm lane to 110 feet along Route 268. These dry, sandy, pine covered uplands are deeply incised by three major streams which flow into the Patuxent or St. Leonard Creek (Figure 1). These streams also cut across the lowlands which vary in elevation from sea level to 40 feet. However, unlike the upland areas, the valleys in the lowlands have been drowned by rising sea levels. The subsequent siltation of these drowned valleys has created a rich costal marsh habitat attractive to a variety of land and water animals. The interplay of the steep to gently rolling topography with the expansive Patuxent River and the delicate St. Leonard Creek is characteristic of the dynamic Chesapeake Bay region.

The modern vegetation of the property is classified as a willow oak - loblolly pine association (Brush et al. 1976). Upon turning from Route 265 onto the narrow farm lane, one immediately notices a predominance of loblolly pines on the sandy upland soils of the higher ground. But when crossing the ravines where the soil is moisture laden the visitor will detect the presence of River Birch and Sycamore, tree species which are more tolerant to the wetter land. As the splendid view of the Patuxent draws one across the lowlands, small springs and drowned coves are observed to support a tidal marsh environment dominated by saltmeadow and cordgrass, common reed, and

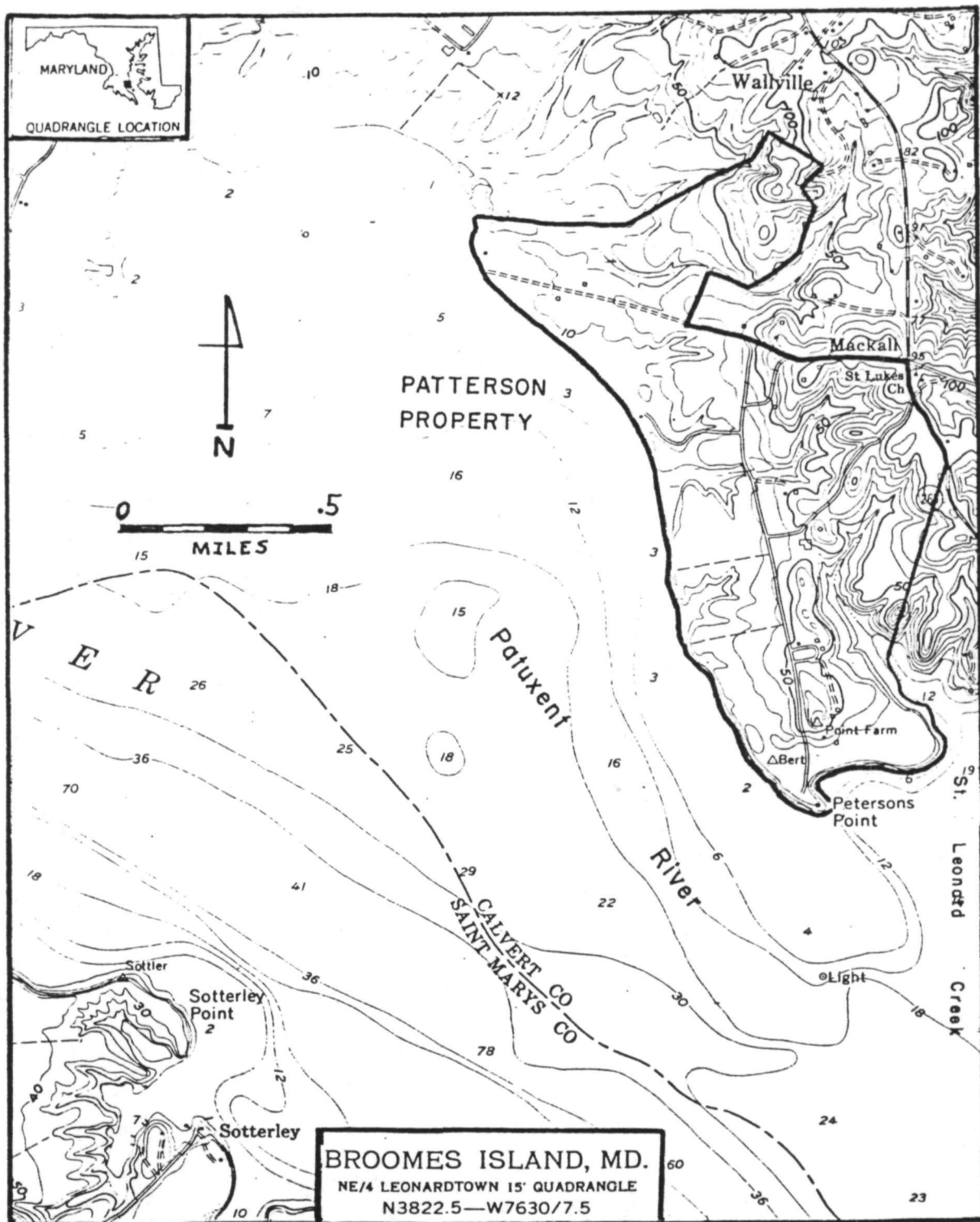


Figure 1: Topographic map showing the boundaries of the Patterson estate.

cat-tails. A naturalist walking through these different plant communities would note the most common plants and trees as being those listed in Table I.

Table I: Common plants found on the Patterson Estate

Willow Oak	White Oak	Black Oak
Loblolly Pine	Virginia Creeper	Dwarf Huckleberry
Red Maple	Sassafras	Tulip Poplar
Sweet Gum	Poison Ivy	Coast Pepperbush
Black Gum	Spanish Oak	Black Cherry
American Holly	Common Highbush Blueberry	Virginia Pine
Greenbriers	Flowering Dogwood	Grape
Beech	Scarlet Oak	Southern Arrowwood

The different plant communities are alive with a variety of animal species whose presence on the property has changed little during the last 12,000 years. Only the number, percentage and distribution of the various species has changed in relation to climatic variations. White-tailed deer, raccoon, opossum, rabbits and a variety of local and migratory birds arrive each fall, as they have done for thousands of years. They share the marsh grasses and the Patuxent River with a wide variety of aquatic species. Oysters, crabs and a variety of fish provide a bountiful harvest although the absence of the sturgeon is a notable loss. Also vanished are the large predators such as elk, wild cats, bear, wolves and beavers. Their disappearance is attributed to the presence of the largest and most feared of all predators, man. But before the fascinating story of man's presence on the property is related, a much earlier period of life will be explored.

THE GEOLOGIC PAST

Along the bluffs exposed at Point Farm, and particularly along St. Leonard Creek, excellent outcrops of the Miocene epoch occur. Estimated at ten to twelve million years old, these fossil beds represent a section of what geologists have termed the Drum Cliff Member of the Choptank Formation of the Chesapeake Group. This formation was defined by geologists based on studies of another section of cliff located at Jones Wharf, only two miles from Point Farm. Therefore, it is not surprising that the latest and most comprehensive geological study of these fossil beds contains a discussion of the fossils found at Point Farm (Gernant 1970).

These fossil beds were formed during a period much warmer than the present, when sea level was higher and covered much of what is now the Coastal Plain province of Maryland. As the animals inhabiting the tropical seas died, their shells were preserved in the sandy bottoms of these extinct seas. At Point Farm, their remains comprise an abnormally thick bed fourteen feet, nine inches in height. At the base of the cliff, a prolific bed of epifaunal bivalve fossils, Isogonomon maxillata, is typically found. Examination of the formation reveals the greatest faunal diversity of all the other known sections of this formation (Figure 2). The shell part of these fossils has frequently leached into the surrounding sand, forming a calcareous cement that binds the sand grains together. Fossiliferous concretions form the rocks along the shoreline of St. Leonard Creek. Accordingly, fossil collecting along the cliff is productive and offers strong potential for future public oriented collecting and interpretation.

Overlying these Miocene sediments is a series of Pliocene age (10 to 3 million years old) and Pleistocene age (3 million to 10,000 years old) gravels, sand and clays. The clay may have served as the essential raw

material for the production of both Indian pottery and bricks for historic structures. The gravels would have provided a ready source of quartz and quartzite needed for the manufacturing of Indian stone artifacts. These deposits form a sequence of "steps" or terraces which are called uplands and lowlands for purposes of this study. Recent studies indicate that these terraces and their overlying gravels were deposited by an ancient river which flowed in the area when sea level was higher than it is presently. The flat areas of the lowlands represent a low terrace of the present river floodplain. The higher and more rolling upland where the main house is located represent older upland terraces now modified by erosion. Except for the changes incurred by rising sea level during the Holocene epoch, the current topography would have essentially remained unchanged since the first appearance of people 14,000 years ago.

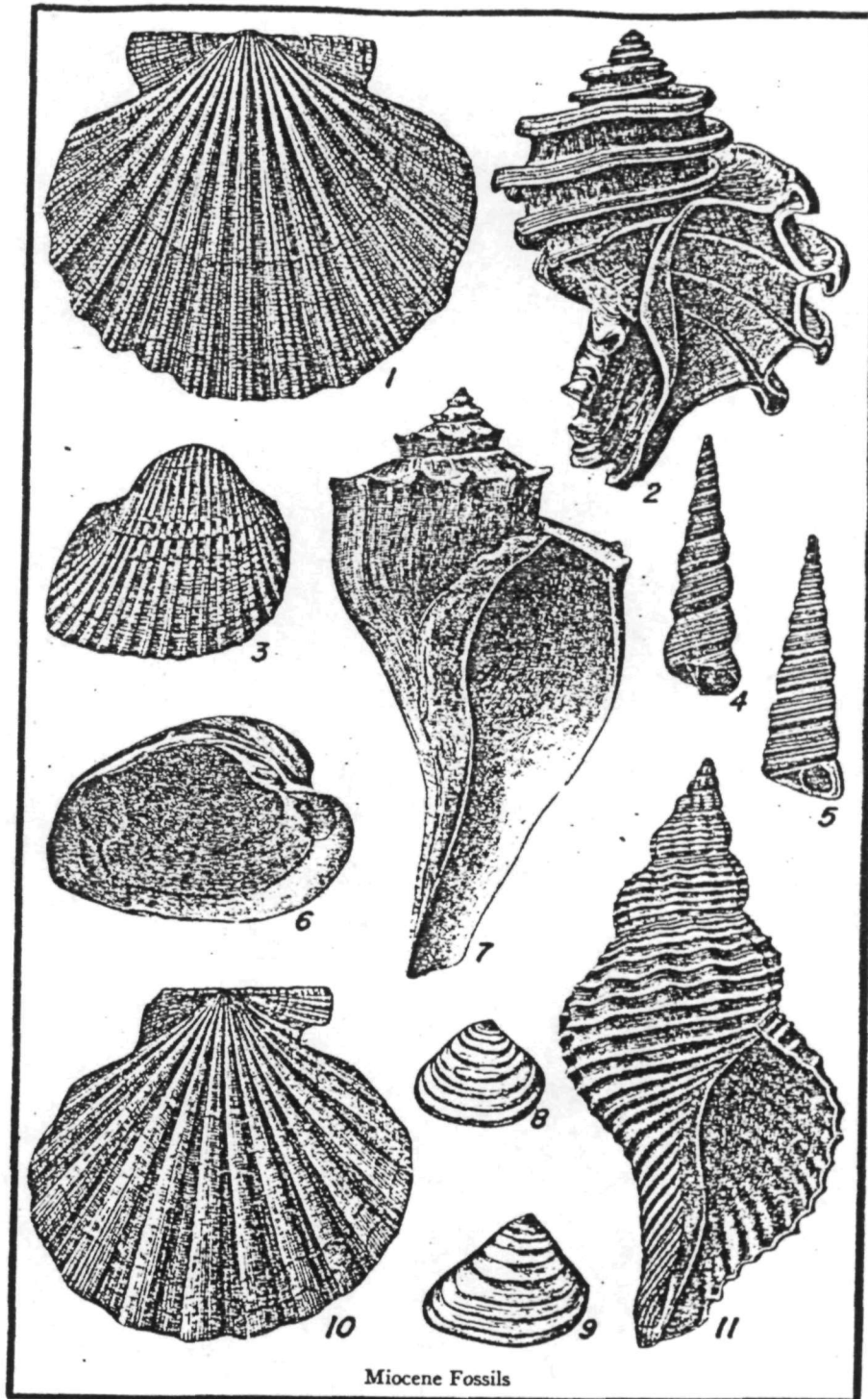


Figure 2: Shellfish species characteristic of the Miocene formation.
(Vokes and Edwards 1974: 209)

SEA LEVEL CHANGE

During the past 14,000 years, the climate of the Patuxent River valley has changed substantially. The varying temperatures and precipitation have directly affected the plants and animals in the valley as well as contributing to the steady rise in sea level. Detailed discussions of the changes in animal and plant communities are provided in a recent synthesis by Laurie Steponaitis (1980: 5-6). But the issue of sea level rise is crucial to interpreting the archeological sites found in the Patterson estate. The fascinating story of sea level rise also demonstrates the dynamic natural forces which challenged both the Indian and European inhabitants of this area.

When the first Indian immigrants arrived in the Patuxent valley around 14,000 years ago, sea level would have been approximately 100 meters below its present elevation. This period was at the close of the last ice age when much of the water was captured by the one mile high continental ice sheets. These ice sheets extended northward from Long Island across all of Canada. During this period, the Patuxent River and St. Leonard Creed would have been fresh water rivers which flowed at the base of deeply incised valleys. As temperatures increased, the continental ice sheets rapidly melted. The huge volume of water returning to the oceans resulted in a rapid rise of sea level between 14,000 and 10,000 years ago.

Based on the geological research conducted in the Delaware and Chesapeake Bays, it is believed the rising sea level commenced flooding the lower portions of the Patuxent 10,000 years before present (Kraft and Brush 1981; Kraft 1947). Most of this flooding would have been confined to the incised valley of the ancestral Patuxent, far removed from the Patterson estate. Upon completion of the major glacial melting 9,000 years ago, the

rate of sea level rise was reduced to about .3 meter per century. At this rate, sea level rise continued until 3,000 years ago when it was further reduced to about .1 meter per century. Over the past 50 years sea level rise has increased to a rate of .36 meter per century (Kraft and Bush 1981). This most recent increase may be directly related to the effects of worldwide pollution, brought about as a result of the industrial revolution.

This continuing rise in sea level has brought about flooding of the lowlands adjacent to the Patuxent (Figure 3). These lowlands would have been prime locations for prehistoric settlements. Many, if not all of the river oriented sites of the earlier periods are now covered by various levels of mud and water of the Patuxent River and St. Leonard Creek. Only the most recent river oriented sites survive. The earlier sites (prior to 200 A.D.) located on the property represent occupations existing when this area was further removed from the river edge than is currently the situation (Figure 3).

Thus as the Patuxent River gradually broadens with the increase in sea level, sites located along its ancestral shores were claimed by erosion. By about 5,000 to 6,000 years ago, the decrease in sea level led to the establishment of oyster bed in the lower Patuxent. Indians soon began gathering these oysters as a convenient food source. This practice continued into the historic period and was readily adopted by the European immigrants. Many shell sites have survived to the present on the Patterson estate, but at least twice as many sites have probably been lost to the rising sea. The discovery and interpretation of the surviving sites takes on added importance since they represent a small percentage of similar sites which have been lost.

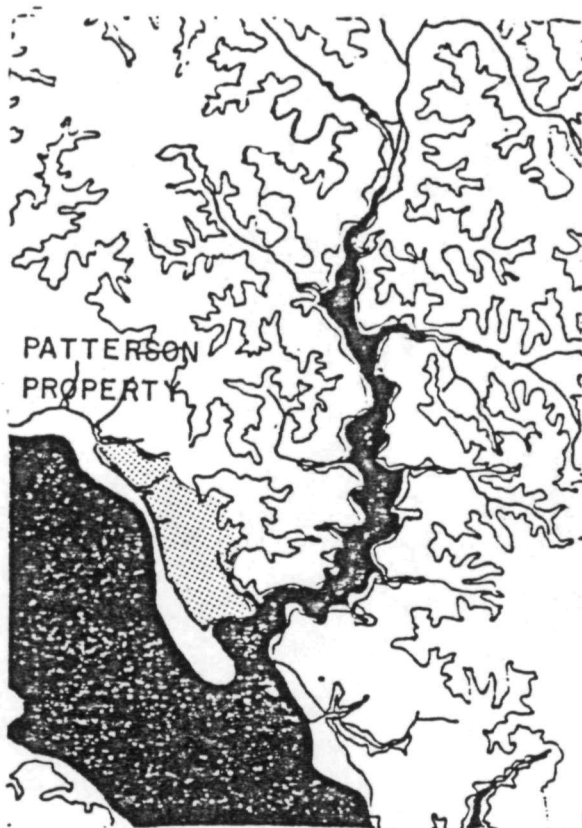


FIGURE 3A: APPROXIMATE SEA LEVEL
IN ST. LEONARD CREEK 1000 YEARS
AGO



FIGURE 3B: SEA LEVEL 2000 YEARS AGO



FIGURE 3C: SEA LEVEL 3000 YEARS
AGO



FIGURE 3D: SEA LEVEL 4000 YEARS AGO

Figure 3: Sea level rise in St. Leonard creek. Estimates based on Kraft et al. (1977) and NOAA Chart 12264 (1967)

SURVEY STRATEGY

When faced with 600 acres of land to survey in only five days, how does one go about documenting the presence and nature of the various archaeological resources expected? For the Patterson estate survey, a number of different methods was employed. These methods took advantage of the various types of vegetation and collecting conditions present. The survey was concerned not only with the location of sites, but also with the size and nature of the sites encountered. Thus, controlled methods of data recording were employed whenever feasible. This section will provide insights into the question most frequently asked of archaeologists; "How do you find an archeological site?".

The first person to record archeological sites on the Patterson estate was Richard Stearns (1943, 1951). Richard Stearns was one of the most respected amateur archeologists in Maryland for he took the time to publish reports on his findings. Beginning in 1934, he conducted boat trips along the Patuxent to locate layers of Indian shell middens eroding out of the banks. On the Patterson estate he noticed two areas with shell deposits, sites 18 CV 16 and 18 CV 17. Interestingly, he collected a stone pipe from 18 CV 17 which was similar to a ceramic pipe collected by Lana Brown some 50 years later. Initially, Lana Brown found artifacts along the beach. They had eroded out of the land sites. Informed of these finds in 1980, Mike Smolek was able to define two shell midden sites which were missed by Richard Stearns during his boat survey (18 CV 65 and 18 CV 66). In the same year, Don Shomette and Ralph Eshelman looked in the area of Mackalls Cliff for the War of 1812 gun emplacement which had been reported in historic documents. They failed to conclusively locate the gun emplacement, but did find the partial remains of a 17th and 20th century house site (18 CV 99). All of these surveys were casual in nature. No one had attempted systematic examination of the various fields on the property. But the surveys did reveal four prehistoric shell middens

and one historic site, hinting at what awaited discovery.

Having reviewed the available data on known sites, the next task was to proceed where no archaeologist had gone before, discovering new clues to the forgotten past. Upon arrival at the Patterson estate on April 6, 1981, the authors drove around noting the different types of vegetation and collecting conditions on the property (Figure 4). These two factors determined which areas were to receive the greatest attention. As a general rule, the greater the amount of exposed ground, the higher the probability of detecting artifacts.

Except for two recently cultivated fields (Figure 5: HH-1 and S-1), the upland areas east of the central farm lane were uniformly covered by woods, pasture or wheat fields (Figure 4). Although the uplands promised to reveal valuable sites, the heavy vegetation cover could only be effectively tested by excavating shovel test pits. This is an exhausting and time consuming task. Only the wooded areas along the shores of St. Leonard Creed could be tested within the available time constraints. (Figure 5). Controlled surface collections were conducted on two cultivated fields, providing insights into the type of sites located at the edge of the upland area.

The lowland areas consisted of a relatively flat plain extending from the water's edge to the base of the uplands, marked by a 40 foot contour interval (Figure 1). This area offered a real challenge, as it contained a variety of vegetation and collecting conditions. It also held the greatest potential for containing significant sites. Therefore, the fieldwork was concentrated in the lowland areas.

In the lowlands, the first area encountered was the beaches. Lana Brown had discovered an amazing variety of artifacts along these beaches which had eroded out of sites 18 CV 17 and 18 CV 65. These beaches, as well as the beaches along the southern and eastern edges of the property, were walked by

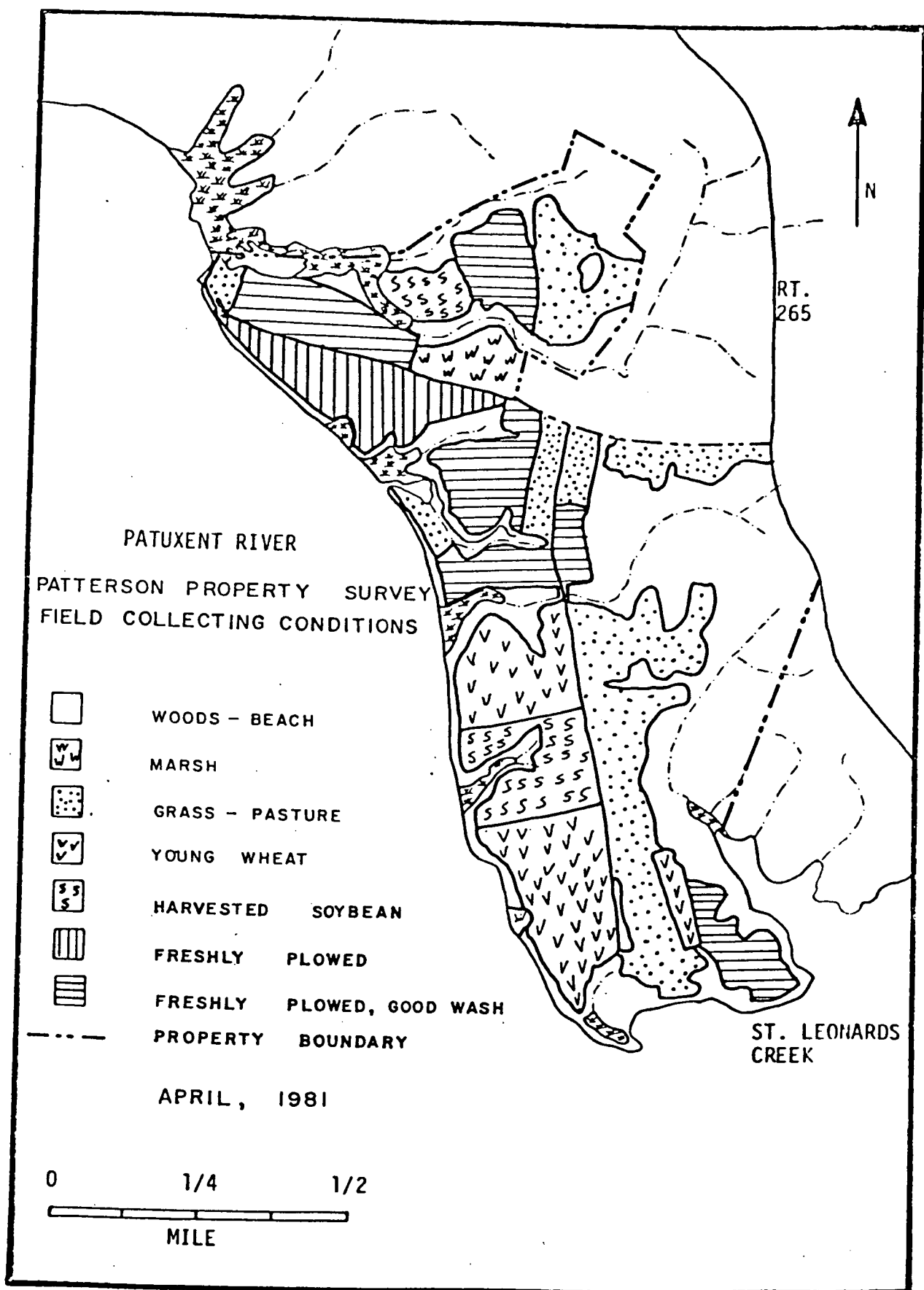


Figure 4: Field Collecting Conditions

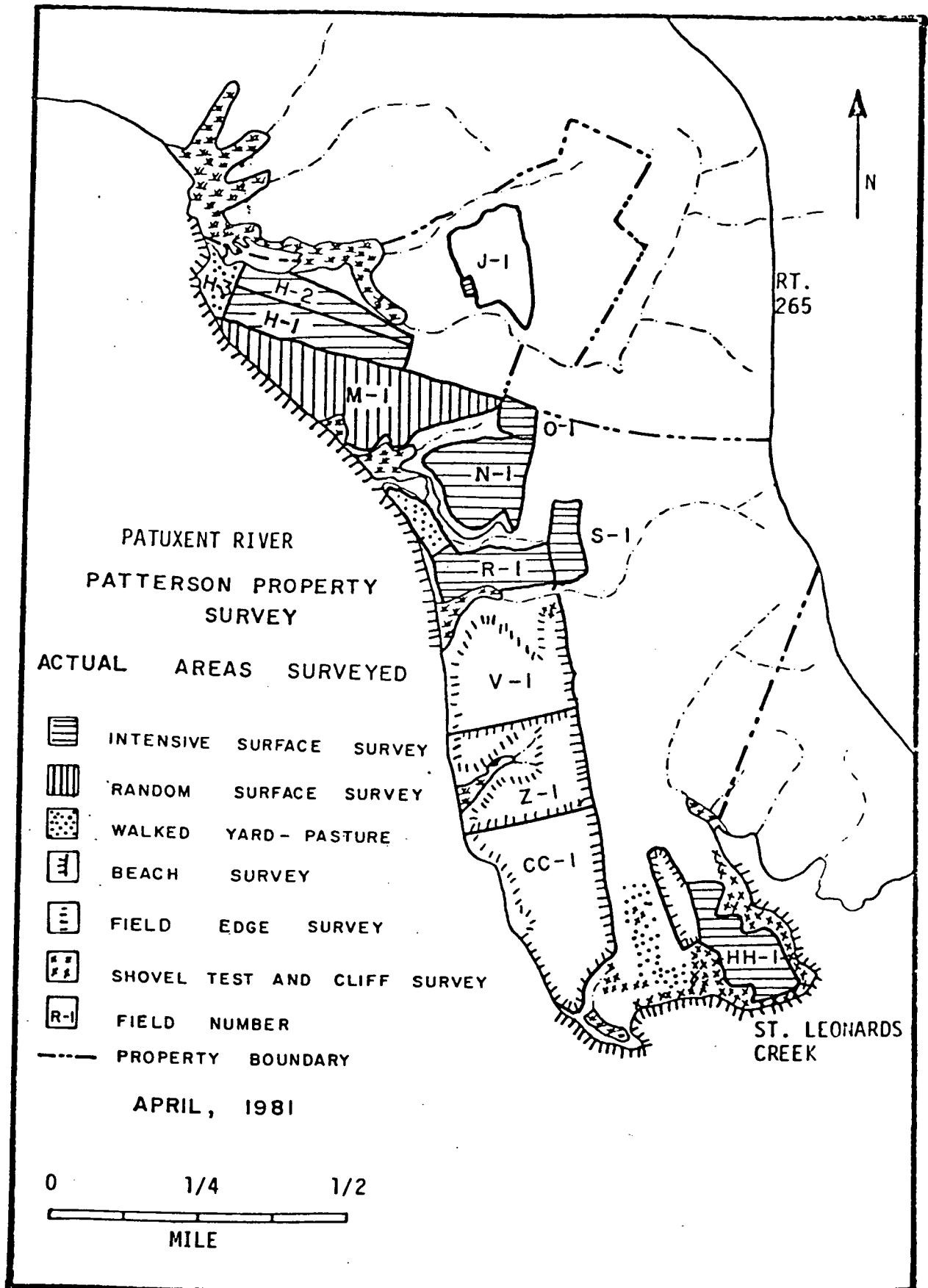


Figure 5: Actual Areas Surveyed

the archaeologists (Figure 5). Concentrations of oyster shell or artifacts in the beaches served as clues to the presence of eroded sites such as 18 CV 68 (Figure 6).

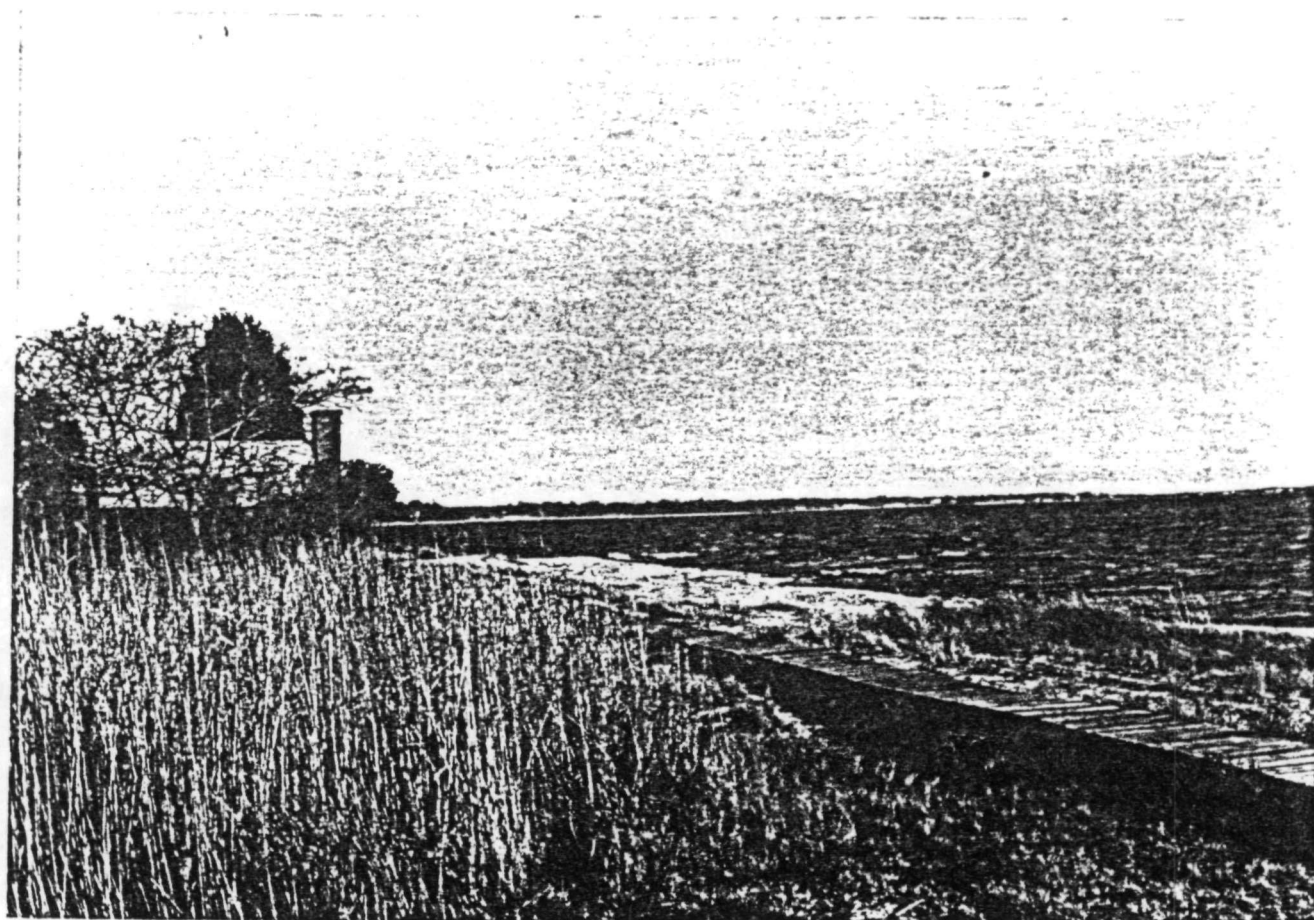


Figure 6: Collecting conditions along the beaches (The beach house served as field house during the survey).

Wooded areas and pasture extend over most of the upland areas. In the lowlands, woods are found bordering all the streams, along the cliff overlooking the beaches, and in hedge rows along the fields (Figure 4). Whenever a site was found in a field or eroding from a cliff, the adjacent woods were casually examined to delineate the total extent of the site. Animal paths and burrows, bases of trees, uprooted trees and steep banks were all examined for shells or artifacts.

Only along the southern cliff face adjacent to St. Leonard Creek were the wooded areas tested with shovel test pits. Survey in this area consisted of careful examination of all exposed cliff faces for oyster shells or artifacts. When evidence of a site was discovered, shovel-size test pits were excavated into the uneroded portions of the cliff. The dirt was carefully troweled in search of artifacts. Other test pits were excavated in areas with no surfacial evidence of sites, but which exhibited sufficiently flat areas (less than 10 degree slope) to be attractive for human settlement. Most of the sites along the southern portion of the property were discovered through a combination of digging shovel test pits and examining exposed surfaces in the woods. These methods, used in conjunction, should also prove effective in locating other sites predicted to exist in the wooded uplands.

The cultivated fields had the greatest percentage of exposed ground and were therefore the focus of our survey efforts. Within these fields, four types of survey conditions were encountered. Each survey condition determined the survey method that would be employed.

The most formidable collecting conditions were encountered in fields covered either by one foot high winter wheat or by harvested soybean stubble (Figure 4). Only about five percent of the ground was exposed in the interior of the soybean fields. A five to ten foot strip of 70 percent exposed ground extended around the field edges. Similar percentages of exposed ground were noted for the wheat fields. While occasional bare spots in the wheat cover afforded closer examinations of interior areas, surveys of these fields were primarily limited to traversing the perimeters of the fields in search of artifacts and shell concentrations (Figure 5). Once such evidence was found along the margin, the bare ground in the interior was carefully examined in an effort to collect as many artifacts as were visible and to define the boundaries of the sites. Sites discovered in this manner include 18 CV 87 through 18 CV 92 (Figure 7).

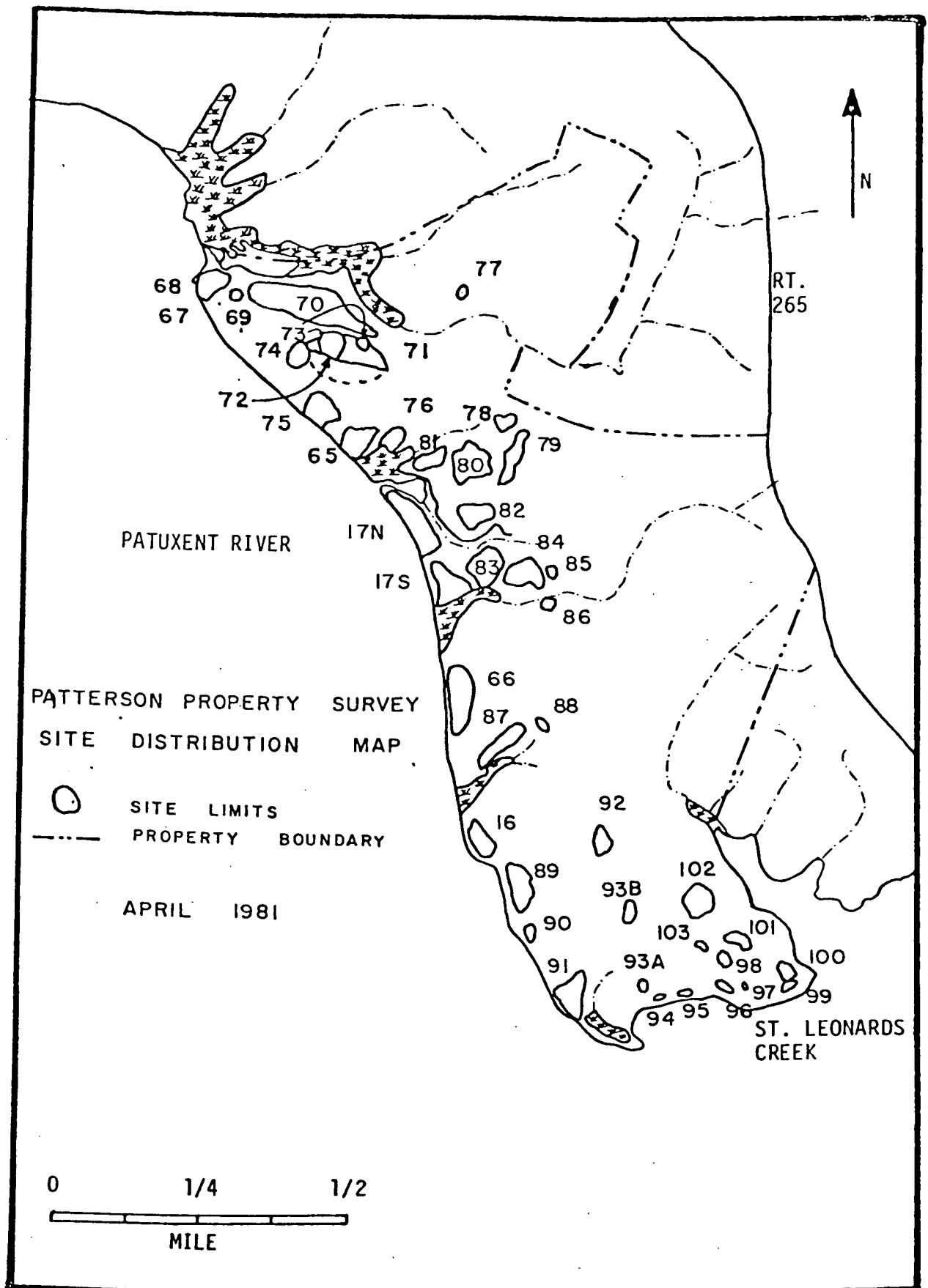


Figure 7: Location and extent of known sites.

By the week's end, the farmer had replowed several of the fields in preparation for spring planting. Although 100 percent of the ground was exposed in these fields, they had only been rained upon once. This rain did not provide sufficient washing to expose artifacts on the surface. Fortunately, all but field M-1 (Figure 5) had been surveyed prior to the second plowing. Because of the strategic location of field M-1 and the presence of several known sites, the field was surveyed. The investigators were able to define the limit of shell scatter. All artifacts observed in field M-1 were collected but the poor wash conditions hindered discovery of artifacts. Only sites 18 CV 74 and 18 CV 76 were newly discovered during this survey. Other sites are expected to exist.

The best collecting conditions existed in fields that had been plowed and disced in early spring. They had undergone good wash from the rains and all artifacts on the surface were readily identifiable (Figure 4). The excellent collecting conditions of these fields provided a golden opportunity to gain detailed knowledge about the distribution of historic and prehistoric artifacts across the lowlands and uplands of the property. Controlled methods of collecting were employed.

The controlled surface collection method consisted of spacing the archeologists either 5 or 10 meters apart at one end of the field. The archeologists maintained this distance as they paced across the fields. Every thirty meters, the artifacts observed by each investigator were recorded. Any artifacts which would aid in the interpretation of the sites were collected and placed in bags which were marked to correspond with the thirty meter areas from which they were retrieved.

When a shell midden was encountered, notes concerning the limits of the shell midden, the density of the shell, and the location of any shell features were recorded. Shell scatter was found in most fields, but slight increases in the density of shells provided clues for locating historic and prehistoric

sites (Figure 8). Because of the presence of shell, the significant 17th century house site in field J-1 (site 18 CV 77) was found within two minutes upon arrival at the field.

When a significant site was found, several methods of more detailed collection were employed to gain a larger and more interpretive sample of data. At site 18 CV 77, all the artifacts found on the surface of the plowed field were marked with surveying flags. Then the entire area of the site, as outlined by the flags, was divided into five meter squares. All artifacts resting in each square were collected and bagged separately. A similar method was employed at site 18 CV 83 but the size of the collecting squares was increased to 15 meters. Both sites 18 CV 84 and 18 CV 79 were intensively collected, but their collecting units corresponded to the same units used for the field survey. These detailed collections, combined with the controlled surface collections of all the fields paced, were used to generate maps illustrating the artifact distributions in the different fields. These maps will be used in subsequent sections of this report to illustrate the different sites discovered.

Plotting the distribution of different types of artifacts and the distribution of shells aided tremendously in defining sites and site boundaries. Site survey forms were completed for all newly discovered sites and official state site numbers were assigned. Site numbers, such as 18 CV 17, are derived as follows: 18 indicates the 18th state in the nation alphabetically (Maryland); CV represents Calvert County; and 17 stands for the 17th site reported to the state from that county. All artifacts recovered from the survey were cleaned and catalog numbers were placed on them by staff members at the Southern Maryland Regional Preservation Center. Copies of all field notes, black and white site photographs, and catalog forms are on file at the Regional Center and the Maryland Historical Trust.



Figure 8: Site 18 CV 98 showing excellent exposure of shell midden in a well washed field.

The varying field methods employed were effective in locating a variety of significant sites. The survey was rewarding because controlled surface collecting methods of general field surveys were perfected to a degree previously unreported for Southern Maryland. The controlled surface collecting method was efficient and accurate. Thus, the Patterson estate project provided a useful testing ground for new survey methods as well as rewarding all with the excitement of new discoveries.

SURVEY RESULTS

The various methods employed to discover and interpret the sites on the Patterson estate yielded a wealth of new information. The number and diversity of sites exceeded all expectations. Every day in the field brought forth shouts of excitement over yet another significant discovery. While only 26 percent of the property was examined (Figure 5), a total of 43 sites were documented. A systematic survey of the remaining 74 percent of the property will undoubtedly double the total number of sites.

To understand the importance of the sites discovered, the prehistoric and historic sites will be discussed in separate parts of this section. Each review will place the sites in historical and archeological perspective. Chronologically diagnostic projectile points and pottery fragments from the prehistoric sites are listed in Tables 2 and 3. The major attributes of both prehistoric and historic sites are compiled in Table 4.

Detailed site information is also supplied in the site survey forms on file at the Division of Archeology, Maryland Historical Trust, and the Southern Maryland Regional Preservation Center. Complimentary copies of the site survey forms accompanies this report to Mrs. Patterson. More detailed site and artifact analyses are planned as part of the Patuxent River Archeological Survey currently being sponsored by the Maryland Historical Trust and the Titewater Administration.

Projectile Point Type	18 CV 17 S	18 CV 17 N	18 CV 65	18 CV 70	18 CV 71	18 CV 77	18 CV 79	18 CV 80	18 CV 81	18 CV 82	18 CV 83	18 CV 84	18 CV 89	18 CV 91	18 CV 98	TOTAL
Kirk Corner Notched											1	1				2
Kirk Stemmed	1		1													2
Stanley Stemmed			1													1
Morrow Mountain I					1											1
Guildford			1													1
Piscataway												1				1
Brewerton Corner Notched			1													1
Holmes			9													9
Savannah River Stemmed			8		1	1										10
Calvert Stemmed			1													1
Rossville			1									1				2
Selby Bay Stemmed		1?	3	4												8
Selby Bay Lanceolate			4													4
Selby Bay Side Notched			2	1												3
Jacks Reef Pentagonal			1													1
Lavanna			5	1				1	1?		1					9
Madison	1		3		1			1		1					1	8
Unknown			9	1			1				2	1	1			15
3/4 Grooved Axe			2													2
Celt			2													2
Soapstone Platform Pipe	1													1		3
TOTAL	3	1	54	7	3	1	1	2	1	1	5	3	1	1	1	85

Table 2: The quantity, type and location of Indian projectile points.

Pottery Type	18 CV 17 S	18 CV 17 N	18 CV 65	18 CV 66	18 CV 70	18 CV 76	18 CV 79	18 CV 80	18 CV 81	18 CV 83	18 CV 84	18 CV 87	18 CV 89	18 CV 96	18 CV 98	18 CV 99	18 CV 101	18 CV 102	TOTAL
Accokeek Cord Impressed	1	1		2					1	5									10
Accokeek Net Impressed			3																3
Popes Creek Net Impressed			1																1
Prince George's Cord Impressed					2														2
Mockley Net Impressed		8	8		5	2								3					26
Mockley Cord Impressed		6	15		2														23
Mockley Plain		3	5																8
Hell Island Cord Impressed			13																13
Rappahannock Fabric Impress	5	15	70	1	3		1	3		2	1			6	3	2			102
Rappahannock Plain	1	140	30		2	1	2	4		2	1	2					1	1	187
Rappahannock Complex Incise		1	11																12
Rappahannock Horizontal Incised	1	1	10																12
Rappahannock Harringbone			3																3
Townsend Corded Horizontal	3	7	1						1										12
Sullivan Cove			6																6
Potomac Creek Cord Impressed									1										1
Potomac Creek Plain									1	2									3
Platform Pipe	1																		1
Roulette Pipe			1																1
Total	11	182	178	1	16	3	3	7	1	10	5	1	2	6	6	2	1	1	436

Table 3: The quantity, type and location of Indian pottery.

THE AMERICAN INDIAN SITES

The Native American Indians occupied the Patuxent River valley for at least 12,000 years before their people and cultures were extinguished by a wave of European invaders. Except for the records left behind by the colonists, our only knowledge of their lives are derived from examination and interpretation of the archeological record. To make sense out of such a long time span of human history, archeologists have divided the prehistoric period into a sometimes confusing number of periods, traditions, and phases (Figure 9).

Fortunately for researchers in the Patuxent, Laurie Steponaitis (1980) has recently synthesized available information about the prehistory of the valley. This synthesis organizes the various sub-divisions of prehistory into a chronological order which can be readily followed (Figure 9). Figure 9 should be used as a convenient reference during the ensuing discussions. The interested reader is encouraged to review Steponaitis' report to gain a more detailed knowledge of the Indian cultures in the Patuxent. Instead of repeating that information, this report will focus upon a review of the sites on the Patterson property and how they relate to sites in the surrounding region. The eight "periods" listed in Figure 9 constitute the basis of this discussion (Paleo Indian through Post-Coulnet).

	Phase	Tradition	Period
			Post-Contact
1600	Sullivan Cove		Late Woodland
1500			
1400			
1300			
1200			
1100	Little Round Bay		Middle Woodland
900			
800			
700			
600			
500	Selby Bay		Early Woodland
400			
300			
200			
100			
B.C./A.D.	Smallwood		
//	Accokeek		
1000	Marcey Creek	Fishtail	Late Archaic
	Late Archaic VI		
1500	Late Archaic V	Broadspear	Middle Archaic
2000	Late Archaic IV		
	Late Archaic III		
2500	Late Archaic II	Piedmont/ Laurentian	
3000			
3500			
4000	Late Archaic I		
4500	Middle Archaic III		Middle Archaic
	Middle Archaic II		
5000			
5500	Middle Archaic I		
6000	Early Archaic V	Bifurcate	Early Archaic
6500	Early Archaic IV		
	Early Archaic III		
7000	Early Archaic II	Corner-Notched	
	Early Archaic I		
7500	Haradaway-Dalton		
8000	Middle Paleo		Paleo-Indian
8500			
9000	Clovis		
9500			

Figure 9: Summary of the chronology. (Steponaitis 1980: 44)

Paleo-Indian Period + 12,000 - 7,500 B.C.

The earliest date for the arrival of the first Paleo-Indian families in Maryland is unknown. Whatever the date, the first families to visit the area of the Patterson property would have found a much different environment than exists today. Sea level would have been approximately 90 feet lower than present. The Chesapeake Bay would have just been forming, inundating spruce and pine forests. Mammoth, mastodon, giant beaver and other now extinct mammals grazed upon grasses in spruce, pine and tundra areas. Only one projectile point from this time period is reported for the entire Coastal Plain portion of the Patuxent (Steponaitis 1980). Any river oriented sites dating to this period have long since been lost to sea level rise. Interior stream oriented sites could be present on the Patterson estate but they are probably buried under wind blown sand deposits and accumulated shell refuse of later Indian cultures. Future discovery of isolated artifacts is expected, given the strategic location of the Patterson estate at the juncture of a major tributary with the Patuxent River.

Early Archaic Period: 7500-6000 B.C.

The earliest evidence of Indian occupation of the lower Patuxent valley was discovered at four sites on the Patterson estate. Sites 18 CV 17S, 18 CV 65, 18 CV 83 and 18 CV 84 each yielded a projectile point of the Kirk stemmed and Corner Notched types (Table 2). These point types have been dated in other states to the period of 7200 to 6900 B.C. Data from other states also indicates that the Indians of the Kirk phase were hunters and gatherers who depended on a wide variety of animal and vegetable resources. Large camps along rivers have been excavated in the south (Chapman 1975). Such excavations revealed charred acorn and hickory nuts in hearths which were lined with carbonized remains of baskets. Similar utilization of the walnut, acorn and hickory nuts in the spreading deciduous forest of the Patterson property probably transpired during

the early Archaic period.

Base camps of the Kirk phase were probably also located along the rivers and have therefore been lost to sea level rise. Recovery of the Kirk point from the beach at site 18 CV 65 suggests that this loss continues today. All four sites are currently adjacent to the Patuxent River on the same unnamed tributary. When occupied by the Indians, this area would have been located several thousand feet west of the Patuxent, near the headwaters of a fresh water stream (Figure 3D). All four sites represent the remains of interior lowland hunting and gathering camps where game was hunted and plant food gathered and processed.

The four sites on the Patterson estate are the only Early Archaic period sites in the lower Patuxent which are reported to have survived sea level rise (Steponaitis 1980: Figure 6.3-6.5). Sites of the earlier Palmer phase and later Bifurcate tradition are absent from the Patterson estate. However, the presence of four Kirk phase sites indicates that other points and artifacts from the Archaic period may be present at these sites and at other places in the lowlands.

Middle Archaic period: 6000-4000 B.C.

The Indians of the Middle Archaic period continued the hunting and gathering life style of the Early Archaic period. The climate was warming, resulting in the stabilization of a northern type deciduous forest. Although the Indians of this period probably had a rich assortment of material items, only their stone artifacts survive in the plowzone. Sea level continued to rise, with salt water conditions becoming firmly established. Oyster gathering may have begun toward the end of the period.

Grooved axes such as the two found on the beach next to site 18 CV 65 first appeared around 5000 B.C. (Figure 10). An isolated Morrow Mountain I projectile point found at the tidewater head of St. Leonard Creek was the only previously reported Middle Archaic artifact from the lower Patuxent (Step-onaitis 1980: 22; Smolek 1980: 165).

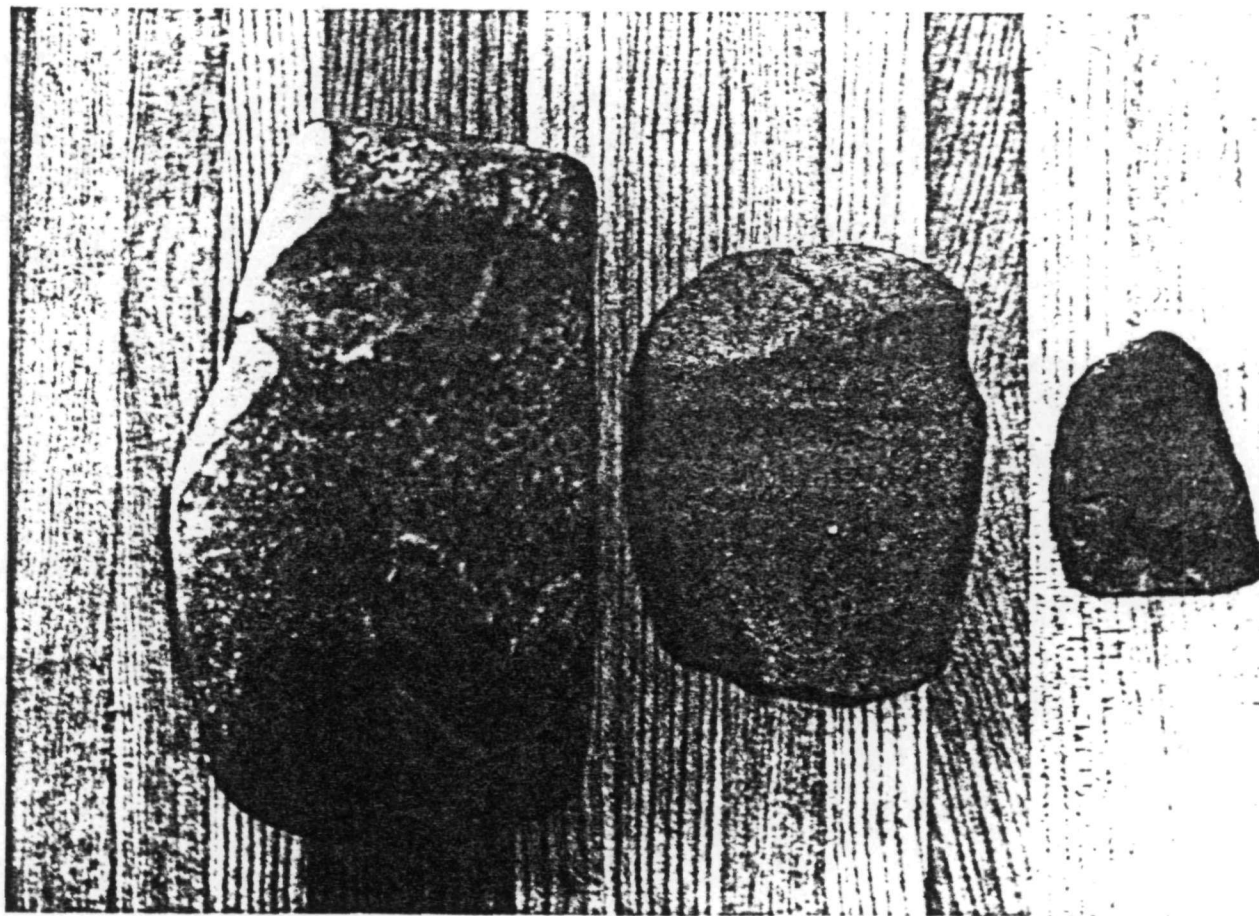


Figure 10: Stone axes found along the beach adjacent to site 18 CV 65.

All three phases of the Middle Archaic period are represented by three projectile points recovered from sites 18 CV 71 and 18 CV 65. Site 18 CV 65 yielded a rare Stanley Stemmed (6000-5000 B.C.) and a Guilford (4200-4000 B.C.) type point. Recovery of both points from the beach suggests that any earlier Indian remains may be buried by layers of shell from later Indian occupations. When site 18 CV 65 was occupied during the Middle Archaic period, the Patuxent would still have been located over one thousand feet to the west. The same applies to site 18 CV 71, which produced one Morrow Mountain I point (5000-42000 B.C.). This quartz point was discarded by the Indians during the manufacturing process. A light scattering of fire-cracked rock and quartz was also noted. These deposits suggest that the area between two small streams (Figure 11) was utilized only during brief visits.

The absence of Middle Archaic period sites from the lower Patuxent is again attributed to the inundation of sites by sea level transgression. As evidence from the upper Patuxent shows an increased number of sites along the river during this period, it is assumed that many of the larger sites have been lost. Those few sites remaining in the lowland areas of the Patuxent document interior related activities such as hunting or the gathering of nut resources. While other sites of this period should be found in the lowlands, the sites on the Patterson estate will continue to be of value to their rarity.

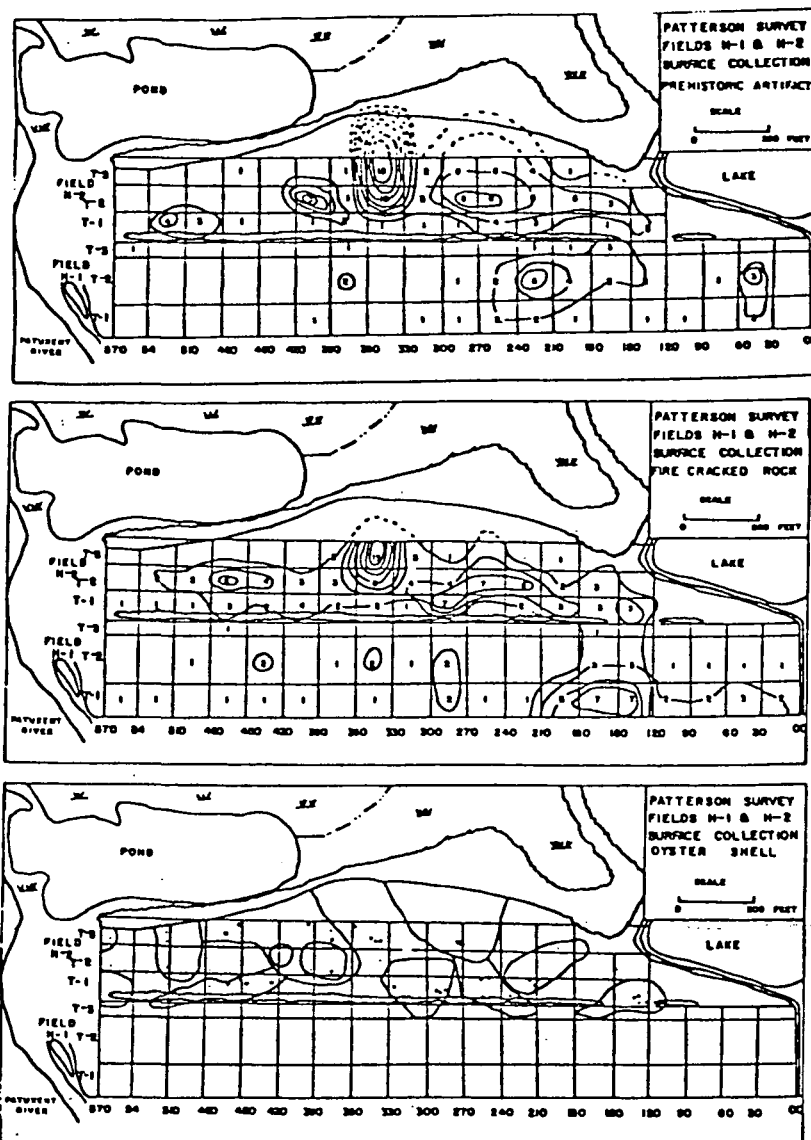


Figure 11: Distribution of prehistoric artifacts in fields H-1 and H-2 (sites 18 CV 71 and 18 CV 70)

Late Archaic period: 4000-1000 B.C.

This 3000 year period witnessed a number of changes in tools used by the Indians. These changes reflect adaptation to the local environment, regional trading and movement, and influences from both the north and the south. While the Indian people were experiencing cultural changes, the weather temperature as well continued to rise. The warming period led to the establishment of extensive deciduous forests, similar to those of today. Sea level was rising at a rate of about one foot per century, until cooler temperatures, beginning around 3000 years ago, decreased the rate to one half foot per century. This period of rise enabled the stailization of esturine resources such as oyster beds and annual fish runs. These resources were not ignored by the Indians. The earliest evidence for collection and consumption of oysters dates to around 3000 B.C. in the upper Chesapeake Bay (Wilke and Thompson 1977) and 2000 to 1000 B.C. on the lower Potomac (Potter 1981: personal communication).

Indian oyster processing camps from the Late Archaic period are not predicted to be present on the Patterson estate since these river edge sites would have been lost to rising sea levels in the flat lowlands. However, the beach along site 18 CV 65 did yield nine Holmes (2200-1900 B.C.) and eight Savannah River Stemmed (1900-1500 B.C.) type points. This great number of points suggests that either a large sized population was staying at the site, or a number of repeated visits were being made by a small group of Indians. Either way, thward the end of the Late Archaic Period, the area of site 18 CV 65 was being used for a longer duration of time. The two three-quartered grooved axes recovered from the beach adjacent to the site may also date to this period (Figure 10).

The collection of a Savannah River Stemmed point from site 18 CV 71 and 18 CV 77 (Table 2) suggest that the Indians were also hunting and gathering in the stream divides and near spring heads in the lowlands. Points from these sites may represent losses during the hunt or evidence of limited occupation or transient camps. Neither site 18 CV 71 nor 18 CV 77 yielded much fire-cracked rock or debitage.

The recovery of a Piscataway point (4000-3000 B.C.) from site 18 CV 84 and a Brewerton Corner Notched Point (3000-2200 B.C.) from 18 CV 65 also suggests a limited utilization of the lowlands during the earlier part of the Late Archaic period. Looking at all of the data, the Late Archaic period witnessed the continued use of the interior portions of the lowlands for possible forays in search of game or vegetable food. By the close of the Late Archaic, evidence for sites of longer duration appear, possibly at the tidal headwaters of the newly forming estuary (site 18 CV 65).

While Late Archaic points were not found on the upland portions of the Patterson estate, a survey at the tidal headwaters of St. Leonard Creek (Smolek 1980: 165) revealed points of the Piscataway type and a steatite bowl fragment (2000-1000 B.C.). Thus utilization of the uplands on the Patterson property probably occurred during this period. Except for the sites noted on St. Leonard Creek, Late Archaic sites are not reported south of Battle Creek (Steponaitis 1980: Figure 6.9-6.15). While intensive survey of the lower Patuxent should reveal more sites, many of the Late Archaic period sites would have been located adjacent to the shorelines of the major rivers and have therefore been lost to sea level rise (Figure 3).

Early Woodland period: 1000-400 B.C.

The hallmark of the Woodland period is the appearance of Indian pottery. During the beginning of the Woodland period, the Archaic period lifeways continued. Through time, the increased number of sites combined with the increased presence of storage pits suggests the development of more stable

hamlets and villages. While various types of domestic plants such as squash and strawberries may have been present during the Late Archaic period, domesticated plants played an ever increasing role in the diet of the Indians during the Woodland period. By the late Woodland period, bean, corn, and squash were significant contributors to the diet, but wild plant and animal foods continued to play an important part in daily subsistence.

The increasingly cooler climate which occurred during the Early Woodland period contributed to the decrease in the rate of sea level rise to only half a foot per century. The cooler climate may have also created hardship on the local Indian groups due to harsher winters. But the Patterson estate continued to attract Indians during this period. Indeed, the small streams currently on the estate probably became tidal by this period and the Patuxent would have been within easy walking or canoeing distance from those sites encountered in our survey.

The first evidence of Indian occupation of the Patterson estate during the Woodland period is suggested by the recovery of Accokeek Cord marked pottery and Calvert type projectile points (Tables 2 and 3) Accokeek Cord Impressed pottery was recovered from sites 18 CV 17 N, 18 CV 17 S, 18 CV 65, 18 CV 70, 18 CV 81, and 18 CV 83. Calvert Stemmed points were recovered from sites 18 CV 65 and 18 CV 69. With the possible exception of 18 CV 83, all six of these sites contain varying amounts of shell. 18 CV 83 also has a scatter of shell but this could date to the 17th century occupation of the site.

As oyster utilization has been documented at other sites during this period, the sites on the Patterson property may represent a hamlet type of occupation. The primary focus was probably upon the exploitation of the Patuxent's estuarian resources. Apparently, sites with low relief situated adjacent to inundated coves and fresh water sources were preferred. All of the sites on the northern portion of the Patterson property are located in this type of environment.

Similar sites may have once existed along St. Leonard Creek in the southern portion of the Patterson estate. However, more active shoreline erosion in these areas has long since committed these sites to an underwater grave. Evidence for use of the uplands is absent, but forays into the uplands from the hamlets presumably occurred.

Sites of the Early Woodland period are not reported south of Battle Creek (Steponaitis 1980). Again, this disappearance of sites is attributed to the effects of shoreline erosion. Therefore, sites which have survived in the lowlands are of great importance toward understanding the seasonal use of the coastline of the lower Patuxent.

Middle Woodland period: 400 B.C. - 800 A.D.

The Middle Woodland period has been the focus of archeological interest and discussion because of the interesting sites it produced. The two phases of this period represent similar adaptations to the estuarian environments, but they have contrasting tool kits (Handman and McNett 1974). The Popes Creek phase (400 B.C. - 200 A.D.) is defined by the presence of thick sand tempered Popes Creek Net Impressed pottery and Rossville points (Table 2 and 3). Stone tools are manufactured almost exclusively from quartz and quartzite. The subsequent Selby Bay phase is defined by shell tempered Mockley Net, Cord and Plain type pottery and Selby Bay Lanceolate, Stemmed and Side Notched points. Selby Bay tools are manufactured almost exclusively from exotic stones imported into the area from the Blue Ridge mountains (meta-rhyolite), the upper Susquehanna River valley (Pennsylvania jasper), the middle Delaware valley (argillite) and the Piedmont of New York (green jasper). Most archaeologists currently argue that these striking differences between local cultures resulted from the influence of a regional trading network. However, recent linguistic evidence, combined with studies in the changes of stone tool styles and preferences, indicate that the Selby Bay phase may mark the migration of

northern Indian groups into the middle Chesapeake Bay region. Linguistic evidence suggests that this period corresponds to the arrival of the Algonquian speaking Indians of the historic period to this region (Levy and Luckenbach n.d.).

Sites on the Patterson estate can contribute to discussions on this fascinating topic. For example, Steponaitis (1980: 30) has noted that ceramics from the Popes Creek phase are rare in the northern Bay. On the Patuxent River sites of the Popes Creek phase are not as abundant as sites from the earlier Accokeek phase. This certainly the case on the Patterson estate where only two sites date to the Popes Creek phase compared to six for the Selby Bay phase. Site 18 CV 65 yielded a Popes Creek Net Impressed sherd and a Rossville point (Table 2-4). An isolated Rossville point was also recovered from site 18 CV 84. While 18 CV 65 may represent a hamlet type camp for the processing of estuarine foods, site 18 CV 83 may simply represent limited hunting or gathering activities. Pope Creek phase sites are expected to have suffered greater losses due to sea level rise, but another factor for their lower density could simply be the increasing undesirability of this area due to political factors.

The political factors are postulated to have been the appearance in the Patuxent valley of Indian groups from the north and west who may have displaced the peoples of the Popes Creek phase. The material culture of the Selby Bay and Popes Creek phase have a number of striking differences which may best be explained by the movement of new people into the area as opposed to the traditional explanation of the changes in material culture of a local group (Popes Creek phase). The introduction of a new pottery type, of exotic lithic material, and a variety of new projectile point forms during the Selby Bay phase document rather extensive changes.

The exotic nature of the artifacts from the Selby Bay phase has resulted in a lot of attention being given to the investigations of these sites. A

variety of Selby Bay phase sites has been reported and excavated in the Patuxent. Hamlet and village size shell middens are common. Six of these sites are present on the Patterson estate (Table 4). At one of these sites (18 CV 65), a cache of three exotic green jasper blades was found along the beach (Figure 12). The presence of these blades is but one example of the participation of the Indians on the Patuxent in a trade network which extended as far north as the Hudson valley in New York.

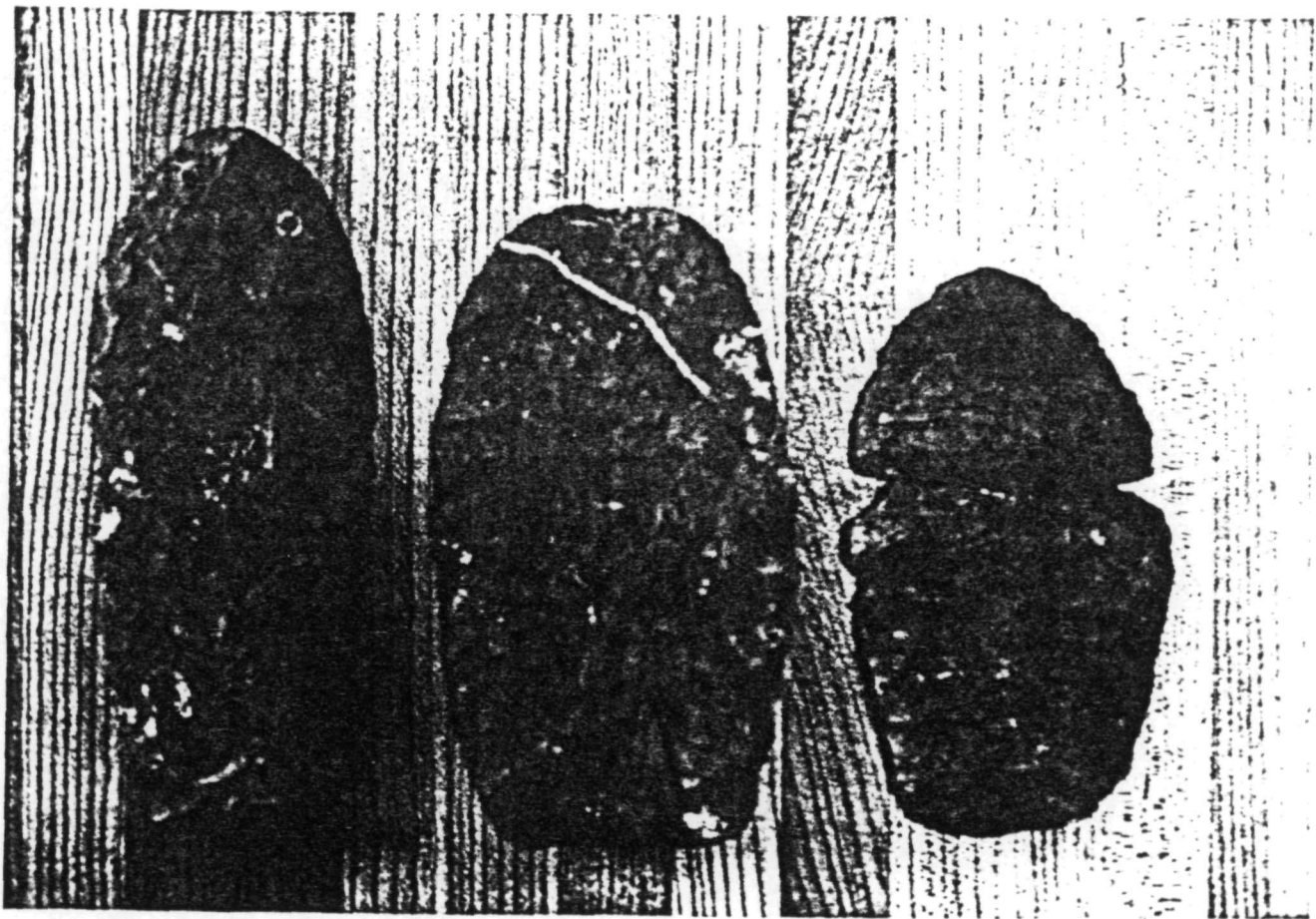


Figure 12: Selby Bay phase green jasper cache blades from site 18 CV 65.

Meta-rhyolite from the Blue Ridge Mountains was used to make the Selby Bay Stemmed or Lanceolate points which were recovered from sites 18 CV 17N, 18 CV 65 and 18 CV 70 (Table 2). Flakes of meta-rhyolite were also noted at sites which produced Selby Bay phase Mockley pottery (18 CV 17N, 18 CV 65, 18 CV 76 and 18 CV 98). All of these sites provide excellent opportunities for the

recovery of undisturbed storage pits and shell pits. At sites 18 CV 70 and 18 CV 76, it was noted that shell concentrations marked the location of sub-surface pits. An undisturbed shell lens was present along the shoreline of site 18 CV 65. All of these lowland sites afford tremendous research potential due to the diversity and presentation of resources.

The one upland site dating to the Selby Bay phase, 18 CV 98, is particularly intriguing. It consists of a shell scatter over an area approximately 100 to 150 feet. Near the center of the scatter is a diameter circle of oyster shell 20 feet in diameter (Figure 13). The inner ring consists of a dense concentration of shell around the edge and a moderate amount of shell in the center. One test pit in the center of the ring failed to reveal any deposits below the plowzone. However, Mokley pottery was found not only on the surface of the ring but it also extended three inches below the plowzone. All evidence indicates that this represents the location of a possible house of the Selby Bay phase. The isolated location of the site in the uplands should make this an important site in unraveling the different types of activities that transpired at Selby Bay costal sites. While other Selby Bay sites are reported from the Lower Patuxent, the sites on the Patterson estate can contribute to the resolution of the controversial topics briefly discussed (Steponaitis 1980: Figure (.13)).

Late Woodland period: 800 A.D. - 1600 A.D.

Most Archeologists agree that the cultures present during the Late Woodland period evolved from the people of the Selby Bay phase. Shell tempering continued to be used in the pottery. But the surface of the pottery was treated with a variety of complicated designs influenced by cultures in the northeast (Clark 1976). Local stone tools were utilized although regional trade networks continued. An increased number of archeological sites in the Patuxent valley suggests increasing populations. This is probably due in part to a greater reliance on cultivated crops. But the resources of the tidal rivers continued to play an important part in the Indian's diet.



Figure 13: Archeologists rest in middle of Selby Bay phase shell ring, site 18 CV 98.

Late Woodland period sites abound on the Patterson estate. This is due, in part, to the survival of more sites of this period along the coast. Only 100 to 200 feet of shoreline is estimated to have been lost since the beginning of the Late Woodland period. The greater number of sites also indicates the establishment of permanent hamlets and villages along the river banks of the lowlands. From these lowland sites, expeditions into the uplands were apparently common. Small hamlet sized estuarine shell midden camps were established with great regularity along the St. Leonard Creek shoreline (Figure 7).

Of the 21 prehistoric sites yielding chronologically diagnostic artifacts, 20 contained artifacts characteristic of the Late Woodland period (Tables 2-4).

Villages are marked by large shell concentrations which probably represent the accumulated refuse of several families repeatedly occupying the area over a period of time. These sites are limited to the lowlands. Hamlet sites are much smaller, representing only one or two families occupying a limited area during different time periods. These sites occur on the upland and lowland areas. Extractive camps in the uplands probably represent special purpose gathering or hunting activities of limited duration.

Storage pits were eroding out of the bank at the village shell midden site, 18 CV 17S, and at the upland hamlet shell midden site, 18 CV 96. Lana Brown has monitored the beach as the storage pit at 18 CV 17S was slowly eroding away. She recovered a beautiful clay platform pipe with a series of squares impressed along its base. Pottery of the Rappahannock Incised type indicates an occupation dating from 1350 to 1600 A.D. The storage pit was complex, with many fill layers (Figure 14). The storage pit at site 18 CV 96 had three layers. It was a typical straight sided pit, three feet deep and three feet wide. The presence of storage pits at these sites suggests permanent or semi-permanent occupation of the sites during the Late Woodland period. The excellent preservation of bone fragments in Late Woodland period shell features may provide a more accurate reconstruction of the seasonal diets of the Indians.

Turning to the artifacts, the pottery types we recovered belong to the shell tempered tradition characteristic of the coastal oriented Indians of the Late Woodland period (Little Round Bay and Sullivan Cove phases). Rappahannock Fabric Impressed pottery predominates although the total range of types are present (Table 3 and Figure 15). Triangular projectile points of both the Little Round Bay (800-1350 A.D.) and Sullivan Cove phases (1350-1600 A.D.) are also present. The artifacts evidenced, combined with the extensive shell remains, indicate that the Patterson property supported a substantial population of Indians throughout the Late Woodland period. John Smith's map compiled in

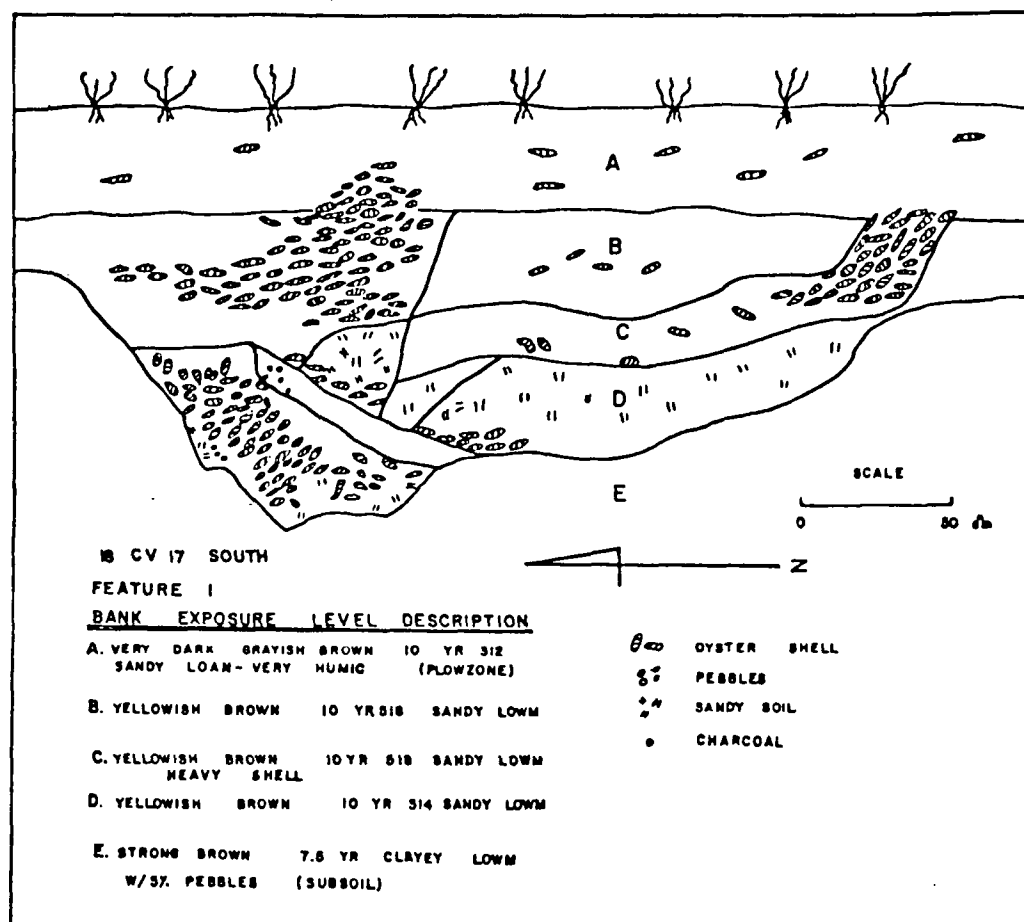


Figure 14: Cross section of Sullivan Cove phase pit exposed on cliff at 18 Cv 17S.

1609, does not appear to show any sites on the Patterson property (Arber 1910). The first site shown appears to be on the south side of Battle Creek. But the ceramics recovered indicate that this area was utilized by the Indians during the latter part of the Late Woodland period. Indians apparently continued to visit this area following English settlement, however the Indians may have been of a different culture (Potomac Creek phase).

Contact period: 1608 - 1690

When John Smith first explored the Patuxent River in 1609, he noted that the Indians were more densely settled along it than on any of the other rivers in the Chesapeake Bay. His map shows a series of villages located in the middle portion of the tidewater Patuxent, but does not show sites in the area of the Patterson property (Figure 16). However, sites 18 CV 83 and 18 CV 84 produced pottery which alludes to the presence of Indians on the property after its 1640 settlement by Englishman. The presence of sherds of Potomac Creek Cord Impressed pottery at 18 CV 87, and of sherds of Potomac Creek Plain pottery at 18 CV 83 and 18 CV 84 provide the tell-tale evidence of possible Indian visits to English settlements on the property (Table 3).

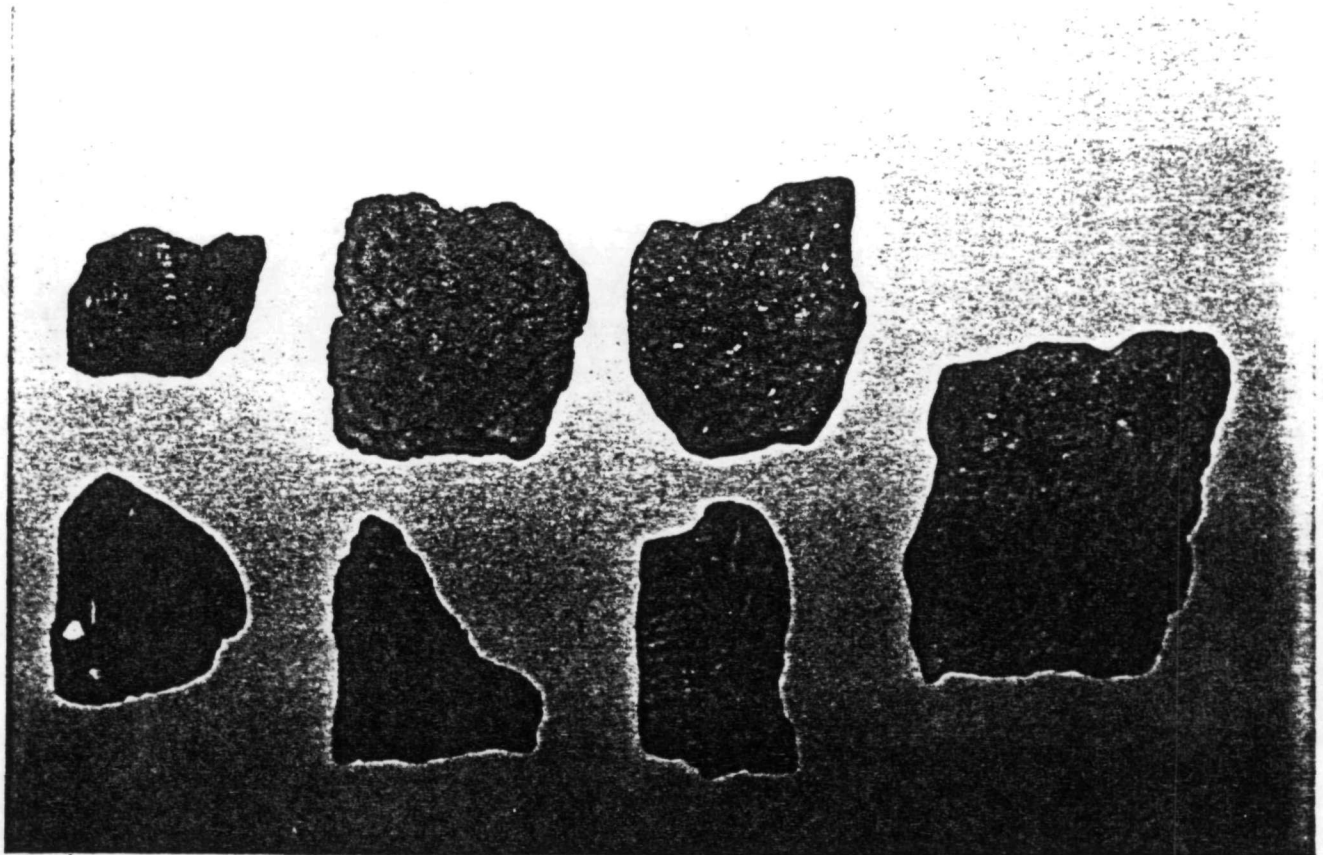


Figure 15: Examples of Late Woodland period pottery from site 18 CV 65 (Rappahannock Fabric Impressed and Sullivan Cove).

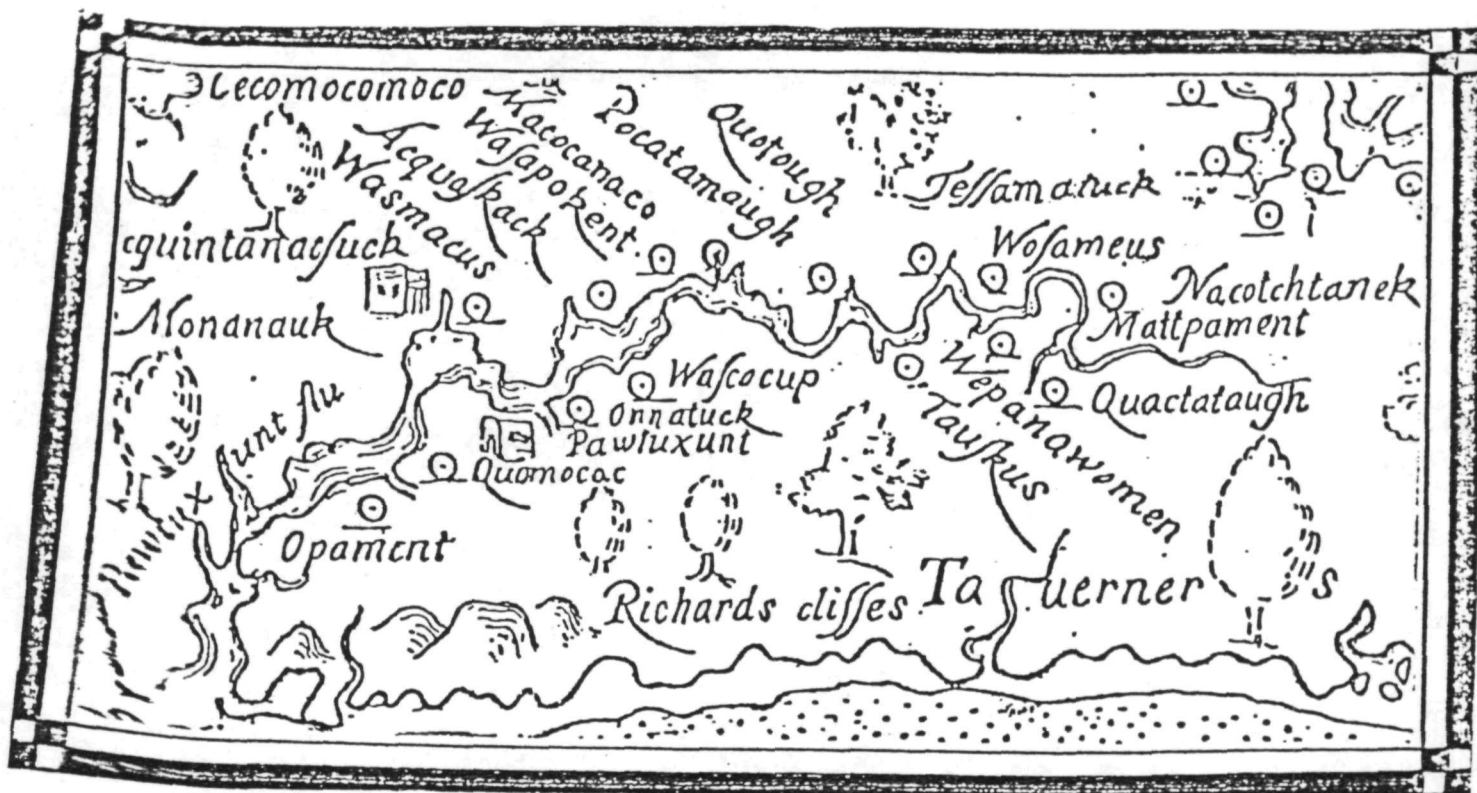


Figure 16: John Smith's 1629 map of Indian sites along the Patuxent River (in Arber 1910).

The Potomac Creek sherds collected are typical of the lost contact pottery of the Piscataway and related Indian tribes located in on the Potomac River. On the Patterson estate, sherds of this phase occur only at these two sites which also mark the location of two important early 17th century English house sites. The pottery could have arrived at the house sites through the trade of pottery vessels containing Indian food. Recovery of a blue glass bead and whittled pipe stem bead suggests that trade may have been a factor. Only through additional investigations will light be shed upon the relationship between the first English families and the last Indian families to share this rich and beautiful land.

For with the coming of the English colonist, the long history of the Indian people of the Patuxent came to a close. By 1690, the entire Patuxent

had been abandoned by all but a few of the Algonquian speaking Indians. A cultural heritage extending over 14,000 years was extinguished. The myths, religion, philosophy, folk medicine and customs were lost, perhaps forever. But other aspects of the Indian lifeways can be glimpsed by the patient archaeologist. The sites on the Patterson property afford a rich source of clues concerning both the Indians' past and the generations of new emigrants who transversed the Atlantic Ocean to transform forever the future America.

SITE NUMBER	SITE NAME	TYPE OF SITE	PERIOD OF OCCUPATION	DATE RANGE	DIMENSION	UNDISTURBED DEPOSITS	STRESSES	SIGNIFICANCE	FUTURE RESEARCH NEEDS
18 Cv 16	Patuxent I	shell midden village	Prehistoric	- - - -	300 x 300	probable shell lenses	moderate shoreline erosion, deep plowing	high	control surface test pits along cliff, soil samples
18 Cv 17 North	Patuxent II	shell midden village	Early Archaic II Late Archaic III Selby Bay Little Round Bay Sullivan Cove	7200-6900 BC 2200-1900 BC 200- 800 AD 800-1350 AD 1350-1600 AD	600 x 120	shell lenses, storage pit, post mold	rapid shoreline erosion, deep plowing	very high	control surface excavate pit, test pits along cliff, monitor beach
18 Cv 17 South	Wallville	shell midden village	Accokeek Selby Bay Little Round Bay Sullivan Cove	750- 400 BC 200- 800 AD 800-1350 AD 1350-1600 AD	300 x 300	shell lenses, probable storage pits	slight shoreline erosion, garden, cultivation	high	systematic shovel test pitting and soil sampling
18 Cv 65	Patterson I	shell midden village	Early Archaic II Middle Archaic I Middle Archaic III Late Archaic II Late Archaic III Accokeek Popes Creek Selby Bay Hell Island Little Round Bay Sullivan Cove	7200-6900 BC 6000-5000 BC 4200-4000 BC 3000-2200 BC 2200-1900 BC 750-400 BC 400 BC-200 AD 200-800 AD 500-800 AD 800-1350 AD 1350-1600 AD	400 x 300	shell lenses, probable storage pits	rapid shoreline erosion, deep plowing	very high	control surface, excavate eroding shell lenses, monitor beach, test pits along cliff.
18 Cv 66	Patterson II	shell midden hamlet	Late Woodland	800-1600 AD	100 x 75	probable shell lenses and storage pits	moderate shoreline erosion, deep plowing	high	control surface test pits along cliff, monitor beach
18 Cv 67	Asbury Shell	shell midden hamlet	Prehistoric	--	25 x 7	shell lenses	moderate shoreline erosion, road disturbed	low	test pits along exposed cliff
18 Cv 68	Asbury Shell	shell midden hamlet	Prehistoric Modern	-- 1880?-present	250 x 200	probable shell lenses and pits historic wells and privies also probable.	slight shoreline erosion, garden, road	potentially high	systematic test pits & soil samples, monitor beach.

Table 4: Summary of historic and prehistoric sites.

SITE NUMBER	SITE NAME	TYPE OF SITE	PERIOD OF OCCUPATION	DATE RANGE	DIMENSION	UNDISTURBED DEPOSITS	STRESSES	SIGNIFICANCE	FUTURE RESEARCH NEEDS
18 Cv 69	Wayne's Hope	shell midden hamlet	Accokeek	750-400 BC	120 x 90	probably none	very deep plowing.	low	control surface, test pitting.
18 Cv 70	Patterson Cove	shell midden hamlets and village	Accokeek Selby Bay Little Round Bay Sullivan Cove	750-400 BC 200-800 AD 800-1350 AD 1350-1600 AD	1300 x 240	shell storage pits, shell lenses	very deep plowing, slight slope wash	very high	control surface, excavate shell, pits, soil sampling.
18 Cv 71	Patterson Lake	transient/extrac-tive lowland camp	Middle Archaic II Late Archaic IV Sullivan Cove	5000-4200 BC 1900-1700 BC 1350-1600 AD	360 x 150	none	deep plowing, slight slope wash	low	control surface
18 Cv 72	Beverly	tenant farmer house	modern	1860-1950s	360 x 360	privy pits, foundations, probable wells	deep plowing	moderate	control surface, informant interview, test privies.
18 Cv 73	LeRoy	shell pits	Late Colonial	1675-1725	120 x 120	shell pits	deep plowing	moderate	control surface, excavate shell pits
18 Cv 74	Double Barn	tenant house and out buildings	modern	1900?-present	apx. 120x120	unknown	deep plowing	low	control surface, informant interview historic research
18 Cv 75	Jeanette Fox	shell midden village	Selby Bay? Late Woodland	200-800 AD 800-1600 AD	300 x 200	shell lenses	rapid shore-line erosion, deep plowing	high	control surface, test pits along cliff, monitor beach.
18 Cv 76	Lana Brown	shell midden village	Selby Bay Late Woodland	200-800 AD 800-1600 AD	180 x 210	shell lenses	deep plowing, slight slope wash	high	control surface, test pits in woods and fields.
18 Cv 77	Spring	farmstead	Early Colonial	1650-1680	140 x 150	probably house foundations	deep plowing, slight slope wash.	very high	control surface of entire site, soil sampling, test pits.

Table 4: Continued

SITE NUMBER	SITE NAME	TYPE OF SITE	PERIOD OF OCCUPATION	DATE RANGE	DIMENSION	UNDISTURBED DEPOSITS	STRESSES	SIGNIFICANCE	FUTURE RESEARCH NEEDS
18 Cv 86	Fowle	tenant farmer house	modern	1870?-1930s?	120 x 120	house foundation well	none	low	informant interview, document research
18 Cv 87	Patterson Marsh	shell midden village	Late Woodland	800-1600 AD	330 x 90	shell lenses	deep plowing, moderate slope wash	high	control surface, test pits in woods & field
18 Cv 88	Tiny	Lowland extractive camp, farmstead?	Prehistoric Colonial	-- --	90 x 45	possible house foundations	deep plowing	high	control surface, soil sample, test pits
18 Cv 89	Bluff	shell midden village	Late Woodland	800-1600 AD	360 x 90	shell lenses, possible storage pits	deep plowing, slightly eroding shoreline	very high	control surface, test pit along cliff, monitor beach.
18 Cv 90	Gulley	shell midden hamlet	Prehistoric	--	40 x 40	possible shell lenses	deep plowing, slightly eroding shoreline.	moderate	control surface, test pit along cliff, monitor beach.
18 Cv 91	Peterson	lowland extractive camp, plantation house	Late Archaic Middle Colonial	4000-1000 BC 1675-1725 AD	360 x 300	brick foundation, probable cellar & outbuildings	deep plowing, slight slope wash and shoreline erosion	very high	control surface, soil sample, test pits, monitor beach
18 Cv 92	Final	farmstead	Colonial	1675-1725	200 x ?	possible foundations	deep plowing	potentially high	control surface, shovel test
18 Cv 93A	Barney's Battery	Cannon in placement	War of 1812	June 25-26, 1814	30 x 15	gun pit & forge	none	very high	soil sample, excavate and reconstruct
18 Cv 93B	Barney's Battery	Cannon in placement	War of 1812	June 25-26, 1814	unknown	probably gun pit	none	very high	shovel test pit, excavate and reconstruct
18 Cv 94	Cliff Hanger	shell midden upland hamlet	Prehistoric	--	50 x ?	shell lenses	rapid shoreline erosion	high	excavate along cliff

Table 4: Continued

SITE NUMBER	SITE NAME	TYPE OF SITE	PERIOD OF OCCUPATION	DATE RANGE	DIMENSION	UNDISTURBED DEPOSITS	STRESSES	SIGNIFICANCE	FUTURE RESEARCH NEEDS
18 Cv 86	Fowle	tenant farmer house	modern	1870?-1930s?	120 x 120	house foundation well	none	low	informant interview, document research
18 Cv 87	Patterson Marsh	shell midden village	Late Woodland	800-1600 AD	330 x 90	shell lenses	deep plowing, moderate slope wash	high	control surface, test pits in woods & field
18 Cv 88	Tiny	Lowland extractive camp, farmstead?	Prehistoric Colonial	17th Century	90 x 45	possible house foundations	deep plowing	high	control surface, soil sample, test pits
18 Cv 89	Bluff	shell midden village	Late Woodland	800-1600 AD	360 x 90	shell lenses, possible storage pits	deep plowing, slightly eroding shoreline	very high	control surface, test pit along cliff, monitor beach.
18 Cv 90	Gulley	shell midden hamlet	Prehistoric	--	40 x 40	possible shell lenses	deep plowing, slightly eroding shoreline.	moderate	control surface, test pit along cliff, monitor beach.
18 Cv 91	Peterson	lowland extractive camp, plantation house	Late Archaic Middle Colonial	4000-1000 BC 1675-1725 AD	360 x 300	brick foundation probable cellar & outbuildings	deep plowing, slight slope wash and shore line erosion	very high	control surface, soil sample, test pits, monitor beach
18 Cv 92	Final	farmstead	Colonial		200 x ?	possible foundations	deep plowing	potentially high	control surface, shovel test
18 Cv 93A	Barney's Battery	Cannon in placement	War of 1812	June 25-26, 1814	30 x 15	gun pit & forge	none	very high	soil sample excavate and reconstruct
18 Cv 93B	Barney's Battery	Cannon in placement	War of 1812	June 25-26, 1814	unknown	probably gun pit	none	very high	shovel test pit, excavate and reconstruct
18 Cv 94	Cliff Hanger	shell midden upland hamlet	Prehistoric	--	50 x ?	shell lenses	rapid shoreline erosion	high	excavate along cliff

Table 4: Continued

SITE NUMBER	SITE NAME	TYPE OF SITE	PERIOD OF OCCUPATION	DATE RANGE	DIMENSION	UNDISTURBED DEPOSITS	STRESSES	SIGNIFICANCE	FUTURE RESEARCH NEEDS
18 Cv 95	Almost Gone	shell midden upland hamlet	Prehistoric	---	100 x 15	shell lenses	rapid shoreline erosion	high	excavate along cliff
18 Cv 96	Storage Pit	shell midden upland hamlet	Little Round Bay	800-1350 AD	150 x 50	shell lenses, storage pit	rapid shoreline erosion	very high	excavate storage pit and along cliff, control surface, test pit.
18 Cv 97	Long Neck	shell midden upland hamlet	Prehistoric	---	apx. 60 x 60	shell lenses	rapid shoreline erosion	moderate	test pitting
18 Cv 98	Joan Kovan	shell midden upland hamlet	Selby Bay Sullivan Cove	200-800 AD 800-1660 AD	150 x 100	shell lenses, possible Indian house pattern	deep plowing	very high	excavation of shell ring, soil sampling, control surface.
18 Cv 99	MacKalls Refuse	shell midden upland hamlet? tenant farmer house	Late Woodland Colonial Modern	800-1600 AD 1660-1700 1850-1950's	90 x 60	none	rapid shoreline erosion, deep plowing	moderate	control surface, test pits along cliff.
18 Cv 100	Barbary	shell midden upland camp	Prehistoric	---	200 x 75	shell lense	gully erosion, deep plowing, moderate slope wash	moderate	control surface, test pits in woods
18 Cv 101	Chitron Neck	upland path and transient camp	Prehistoric	---	270 x 150	possible shell lense	deep plowing moderate slope wash	low	control surface
18 Cv 102	Sprout Farm	upland extrac- tive camp, farm- stead.	Late Woodland Early Colonial	800-1600 AD 1640-1660 AD	330 x 300	possible house foundation	deep plowing moderate slope wash	very high	control surface, soil sampling, test pits
18 Cv 103	Joyce Eiler	shell midden upland camp	Late Woodland	800-1600 AD	90 x 60	possible shell lenses	gully erosion, deep plow	moderate	control surface, test pits

Table 4: Continued